# Title 10 - DEPARTMENT OF NATURAL RESOURCES

#### **Division 10 - Air Conservation Commission**

Chapter 6 – Air Quality Standards, Definitions, Sampling, and Reference Methods and Air Pollution Control Regulations for the Entire state of Missouri

#### PROPOSED RULE

10 CSR 10-6.362 Clean Air Interstate Rule Annual NOx Trading Program. If the commission adopts this rule action, it will be submitted to the U.S. Environmental Protection Agency for inclusion in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address and phone number listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/regagenda.htm.

# (1) Applicability

- (A) The following units in a State shall be CAIR NOX units, and any source that includes one or more such units shall be a CAIR NOX source, subject to the requirements of sections (3) and (4) of this rule:
  - 1. Except as provided in subsections (B) and (C) of this section, a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the start-up` of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.
  - 2. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit serving at any time a generator with nameplate capacity of more than 25 MWe and supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to subsection (A) of this section starting on the day on which the unit first no longer qualifies as a cogeneration unit.
- (B) Low Emission Low Run Hour Exemptions
  - 1. Any unit under subsection (1)(A) of this rule, which demonstrates, using the emission estimation methods outlined in subsection (4)(C) of this rule, that the unit's mass NOx emissions are fifty (50) tons or less during the

- calendar year is exempt from the requirements of this rule.
- 2. The provisions of this rule shall not apply to any emergency standby generator, internal combustion engine and peaking combustion turbine unit demonstrated to operate less than seven hundred (700) hours per calendar year averaged over the three (3) most recent years of operation, which have installed and maintain in proper operation a nonresettable engine hour meter.
- 3. Loss of Exemption. If the exemption limit in paragraph 1. or 2. of this subsection is exceeded, the exemption shall not apply and the owner or operator must notify the administrator or designee within thirty (30) days. If the owner or operator can demonstrate to the administrator or designee that the exemption limit was exceeded due to emergency operations or uncontrollable circumstances, the exemption in paragraph 1. or 2. of this subsection shall apply.
- (C) Retired unit exemption.
  - 1. General Provisions
    - A. Any CAIR NOX unit that is permanently retired and is not a CAIR NOX opt-in unit shall be exempt from the CAIR NOX Trading Program, except for the provisions of this section, § 96.102, § 96.103, § 96.104, § 96.106(c)(4) through (8), § 96.107, and subparts BB, FF, and GG of 40 CFR 96 as incorporated by reference in sections (2), (3) and (4) of this rule.
    - B. The exemption under subparagraph (1)(C) of this section shall become effective the day on which the CAIR NOX unit is permanently retired. Within 30 days of the unit's permanent retirement, the CAIR designated representative shall submit a statement to the permitting authority otherwise responsible for administering any CAIR permit for the unit and shall submit a copy of the statement to the Administrator. The statement shall state, in a format prescribed by the permitting authority, that the unit was permanently retired on a specific date and will comply with the requirements of paragraph 2. of this subsection.
    - C. After receipt of the statement under subparagraph 1.B. of this subsection, the permitting authority will amend any permit under subpart CC as incorporated by reference in section (3) of this rule covering the source at which the unit is located to add the provisions and requirements of the exemption under subparagraph 1.A. and paragraph 2. of this subsection.
  - 2. Special provisions.
    - A. A unit exempt under paragraph 1. of this subsection shall not emit any nitrogen oxides, starting on the date that the exemption takes effect.
    - B. The permitting authority will allocate CAIR NOX allowances under subsection (3)(B) of this rule to a unit exempt under

- paragraph 1. of this subsection.
- C. For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under paragraph 1. of this subsection shall retain at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the permitting authority or the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.
- D. The owners and operators and, to the extent applicable, the CAIR designated representative of a unit exempt under paragraph 1. of this subsection shall comply with the requirements of the CAIR NOX Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
- E. A unit exempt under paragraph 1. of this subsection and located at a source that is required, or but for this exemption would be required, to have a title V operating permit shall not resume operation unless the CAIR designated representative of the source submits a complete CAIR permit application under § 96.122 as incorporated by reference under section (3) of this rule for the unit not less than 18 months (or such lesser time provided by the permitting authority) before the later of January 1, 2009 or the date on which the unit resumes operation.
- F. On the earlier of the following dates, a unit exempt under paragraph 1. of this subsection shall lose its exemption:
  - (i) The date on which the CAIR designated representative submits a CAIR permit application for the unit under subparagraph 2.E. of this subsection;
  - (ii) The date on which the CAIR designated representative is required under subparagraph 2.E. of this subsection to submit a CAIR permit application for the unit; or
  - (iii) The date on which the unit resumes operation, if the CAIR designated representative is not required to submit a CAIR permit application for the unit.
- G. For the purpose of applying monitoring, reporting, and recordkeeping requirements under subpart HH as incorporated in subsection (4) of this rule, a unit that loses its exemption under paragraph 1. of this subsection shall be treated as a unit that commences operation and commercial operation on the first date on which the unit resumes operation.

### (2) Definitions

(A) Subsections 40 CFR 96.103 and 96.104 of 40 CFR 96 Subpart AA promulgated as

- of July 1, 2005 are hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.
- (B) Definitions of certain terms in this rule, other than those specified in this rule, may be found in 10 CSR 10-6.020.

# (3) General Provisions

(A) All of the subsections, unless otherwise noted in this section, of 40 CFR 96 Subparts BB, CC, DD, FF, GG, and II promulgated as of July 1, 2005 are hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.

### (B) NOx Allowances.

- 1. Timing requirements for CAIR NOX allowance allocations.
  - A. By October 31, 2007, the permitting authority will submit to the Administrator the CAIR NOX allowance allocations, in a format prescribed by the Administrator, for the calendar years in 2009, 2010, 2011, 2012, 2013, and 2014 consistent with the allocations established in paragraph 2. of this subsection.
  - B. By October 31, 2007, the permitting authority will submit to the Administrator the CAIR NOX allowance allocations, in a format prescribed by the Administrator, for the calendar year beginning 2015 and extending through 10 calendar years consistent with the allocations established in paragraph 2. of this subsection.
  - C. By October 31, 2015 and October 31 of every tenth year following, the permitting authority will submit to the Administrator the CAIR NOX allowance allocations, in a format prescribed by the Administrator, for the calendar year 10 years in the future and extending through 10 calendar years consistent with paragraph 2. of this subsection.
- 2. NOX allowance allocations.
  - A. The state trading program NOx budget allocated by the director under subparagraphs (3)(B)2.B and (3)(B)2.C. of this rule for a calendar year will equal the total number of tons of emissions apportioned to the NOx budget units in Missouri for the calendar year, as determined by the applicable, approved state implementation plan.
  - B. The following NOx budget units shall be allocated NOx allowances for each calendar year in accordance with Table I of paragraph (3)(B)2.B.

Percentage of NOx Allowances Heat Input by Unit

Energy efficiency and renewable generation projects Set Aside

300

- C. Any unit subject to section (1) other than those listed in Tables I of this subsection will not be allocated NOx budget allowances under this rule.
- D. Reserved.
- E. Reserved for EE/RE Language
- 3. Compliance supplement pool.
  - A. For any CAIR NOX unit in the State that achieves NOX emission reductions in 2007 and 2008 that are not necessary to comply with any State or federal emissions limitation applicable during such years, the CAIR designated representative of the unit may request early reduction credits, and allocation of CAIR NOX allowances from the compliance supplement pool in accordance with the following:
    - (I) The owners and operators of such CAIR NOX unit shall monitor and report the NOX emissions rate and the heat input of the unit in accordance with section (4) of this rule in each calendar year for which early reduction credit is requested.
    - (II) The CAIR designated representative of such CAIR NOX unit shall submit to the permitting authority by July 1, 2009 a request, in a format specified by the permitting authority, for allocation of an amount of CAIR NOX allowances from the compliance supplement pool not exceeding the sum of the amounts (in tons) of the unit's NOX emission reductions in 2007 and 2008 that are not necessary to comply with any State or federal emissions limitation applicable during such years, determined in accordance with section (4) of this rule.
    - (III) For Acid Rain units that do not have an applicable NOx emission limit, the Acid Rain NOx emission rate limit that would have applied had the unit been limited by Acid Rain NOx requirements or state emission rate limit shall be utilized to determine the number of potential ERCs those units may receive.
  - B. For any CAIR NOX unit in the State whose compliance with CAIR NOX emissions limitation for the calendar year 2009 would create an undue risk to the reliability of electricity supply during such

- calendar year, the CAIR designated representative of the unit may request the allocation of CAIR NOX allowances from the compliance supplement pool under subparagraph A. of this paragraph, in accordance with the following:
- (I) The CAIR designated representative of such CAIR NOX unit shall submit to the permitting authority by March 1, 2009 a request, in a format specified by the permitting authority, for allocation of an amount of CAIR NOX allowances from the compliance supplement pool not exceeding the minimum amount of CAIR NOX allowances necessary to remove such undue risk to the reliability of electricity supply.
- (II) In the request under paragraph B. of this subsection, the CAIR designated representative of such CAIR NOX unit shall demonstrate that, in the absence of allocation to the unit of the amount of CAIR NOX allowances requested, the unit's compliance with CAIR NOX emissions limitation for the calendar year 2009 would create an undue risk to the reliability of electricity supply during such calendar year. This demonstration must include a showing that it would not be feasible for the owners and operators of the unit to:
  - (a) Obtain a sufficient amount of electricity from other electricity generation facilities, during the installation of control technology at the unit for compliance with the CAIR NOX emissions limitation, to prevent such undue risk; or
  - (b) Obtain under subparagraphs A. and C. of this paragraph, or otherwise obtain, a sufficient amount of CAIR NOX allowances to prevent such undue risk.
- C. The permitting authority will review each request under subparagraphs A. and B. of this paragraph submitted by March 1, 2009 and will allocate CAIR NOX allowances for the calendar year 2009 to CAIR NOX units in the State and covered by such request as follows:
  - (I) Upon receipt of each such request, the permitting authority will make any necessary adjustments to the request to ensure that the amount of the CAIR NOX allowances requested meets the requirements of paragraph A. or B. of this subsection.
  - (II) If the total amount of CAIR NOX allowances in all requests (as adjusted under paragraph 1. of this subsection) is not more than 9,044, the permitting authority will allocate to each CAIR NOX unit covered by such requests the amount

- of CAIR NOX allowances requested (as adjusted under paragraph 1. of this subsection).
- (III) If the total amount of CAIR NOX allowances in all requests (as adjusted under paragraph 1. of this subsection) is more than 9,044, the permitting authority will allocate CAIR NOX allowances to each CAIR NOX unit covered by such requests as follows:
  - A. The compliance supplement pool shall be divided into two pools of 3,015 allowances and 6,029 allowances each.
  - B. Units located in Buchanan, Jackson or Jasper County that combust at least 100,000 passenger tire equivalents in each of 2007 and 2008 shall be eligible to request ERCs from the smaller pool.
  - C. ERCs from the smaller pool shall be allocated according to the following formula:

Unit's allocation = Unit's adjusted allocation \* (3,015 / Total adjusted allocations for eligible units)

## Where:

"Unit's allocation" is the number of CAIR NOX allowances allocated to the unit from the State's compliance supplement pool.

"Unit's adjusted allocation" is the amount of CAIR NOX allowances requested for the unit under subparagraph A. and B. of this paragraph, as adjusted under paragraph 1. of this subsection.

"Total adjusted allocations for eligible units" is the sum of the amounts of allocations requested under subparagraph A. and B. of this paragraph, as adjusted under paragraph 1. of this subsection by the units identified in subparagraph (3)(C)3.B.

- D. Units that receive ERCs from the smaller portion of the compliance supplement pool shall not be eligible to receive ERCs from the remaining portion of the compliance supplement pool.
- E. Any ERCs not allocated under subparagraph (3)(C)3.C. shall be added to the pool of 6,029 allowances and allocated according to the following formula:

Unit's allocation = Unit's adjusted allocation \* (6,029 + Remainder from first allocation) / Total adjusted allocations for eligible units)

Where:

"Unit's allocation" is the number of CAIR NOX allowances allocated to the unit from the State's compliance supplement pool.

"Unit's adjusted allocation" is the amount of CAIR NOX allowances requested for the unit under subsection (A) and (B) of this section, as adjusted under paragraph 1. of this subsection.

"Remainder from first allocation" is the amount of CAIR NOX allowances from the smaller pool not allocated under subparagraph (3)(C)3.C. "Total adjusted allocations for eligible units" is the sum of the amounts of allocations requested for all units under subsection (A) and (B) of this section, as adjusted under paragraph 1. of this subsection by units that were not allocated ERCs under subparagraph (3)(C)3.C.

- (IV) By November 30, 2009, the permitting authority will determine, and submit to the Administrator, the allocations under paragraph 2. and 3. of this subsection.
- (V) By January 1, 2010, the Administrator will record the allocations under paragraph 4. of this subsection.
- (4) Reporting and Recordkeeping
  - (A) All of the subsections, unless otherwise noted in this section, of 40 CFR 96 Subpart HH promulgated as of July 1, 2005 are hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.
  - (B) Each owner or operator of any gas- or oil-fired unit that qualifies for the low-emitter exemption in subsection 96.104(b)(3)(i) or the low hours of operation exemption in subsections 96.104(b)(3)(ii), shall maintain records of the total operating hours during which fuel is consumed for each emission unit during the calendar year. In the event that another record keeping schedule has been previously approved for the EGU and is included as an operating permit condition, the EGU may use that schedule to comply with this requirement.
  - (C) Exempt Units.
    - 1. The following hierarchy of methods may be used to determine if a unit qualifies for the low-emitter exemption in subsections 96.104(b)(3)(i). If data is not available for an emission estimation method or an emission estimation method is impractical for a source, then the subsequent emission estimation method should be used in its place:
      - A. CEMS:
      - B. Stack tests;
      - C. Material/mass balance;
      - D. AP-42 (Environmental Protection Agency (EPA) Compilation of Emission Factors)
      - E. FIRE (Factor Information and Retrieval System) (as updated);
      - F. Other EPA documented test methods;
      - G. Sound engineering calculations; or

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- H. Facilities shall obtain the administrator's pre-approval of emission estimation methods other than those listed above.
- 2. In the event that such method has previously been approved for the EGU and included as an operating permit condition, the EGU may use that method to comply with this requirement.
- 3. Any gas- or oil-fired unit that qualifies for the low-emitter exemption in subsection (1)(B) of this rule or the low hours of operation exemption in paragraph subsections (1)(B) shall install and operate a non-resettable hour meter or determine the hours of operation for each emission unit during the calendar year. In the event that another monitoring method has previously been approved for the EGU and included as an operating permit condition, the EGU may use that method to comply with this requirement.

# (5) Test Methods

